WHAT IS CLAIMED IS:

1. An image processing device, comprising:

an input which receives a stereo pair of images;

a foreground extractor coupled to the input which compares location of like pixel information in each image to determine which pixel information is foreground pixel information and which pixel information is background pixel information;

a DCT block classifier coupled to the foreground extractor which determines which DCT blocks of at least one of the images contain a threshold amount of foreground information; and

an encoder coupled to the DCT block classifier which encodes the DCT blocks having the threshold amount of foreground information with a first level of quantization and which encodes the DCT blocks having less than the threshold amount of foreground information at a second lower quantization level.

2. The image processing device as claimed in claim 1, wherein the stereo pair of images are received from a stereo pair of cameras spaced closely from one another in a video conference system.

3. The image processing device as claimed in claim 1, wherein the foreground extractor computes the difference in location of like pixels in each image and selects the foreground pixels as

those pixels whose difference in location falls above a threshold distance.

4. An image processing device, comprising:

an input which receives a stereo pair of images;

a foreground extractor which detects foreground pixel information from the stereo pair of images; and

an encoder coupled to the foreground extractor which encodes the foreground pixel information at a first high level of quantization and which encodes background pixel information at a second lower level of quantization.

5. The image processing device as claimed in claim 4, wherein the foreground extractor computes the difference in location of like pixels in each image and selects the foreground pixels as those pixels whose difference in location falls above a threshold distance.

6. The image processing device as claimed in claim 4, wherein the foreground pixel information is defined in terms of entire 8 x 8 blocks of DCT coefficients.

7. An image processing system, comprising:

a stereo pair of cameras for taking a stereo pair of images;

a foreground extractor which detects foreground pixel information from the stereo pair of images; and

an encoder coupled to the foreground extractor which encodes the foreground pixel information at a first high level of quantization and which encodes background pixel information at a second lower level of quantization.

8. A method of encoding a stereo pair of images, comprising:

receiving the stereo pair of images;

extracting foreground information from the stereo pair of images; and

encoding the foreground information at a first higher quantization level and encoding background information of the stereo pair of images at a second lower quantization level.

9. The method in accordance with claim 8, wherein the step of extracting includes the following steps:

identifying the locations of like pixels in each of the stereo pair of images;

calculating the difference between the locations of like pixels; and

determining for each set of like pixels whether the difference between locations falls above a threshold difference, and if so identifying those pixels as foreground information.

10. The method in accordance with claim 8, wherein the encoding step encodes an entire 8 x 8 block of DCT coefficients as foreground information if at least a predetermined number of

foreground pixels are within the 8 x 8 block, otherwise the entire 8 x 8 block of DCT coefficients is encoded as background information.

SUB A4

11. Computer-executable process steps to process image data from a stereo pair of images, the computer-executable process steps being stored on a computer-readable medium and comprising:

a foreground extracting step to detect foreground pixel information from the stereo pair of images; and

an encoding step for encoding foreground pixel information of at least one image at a first higher quantization level and for encoding background pixel information of the at least one image at a second lower quantization level.

SUB A1

12. The computer-executable process steps as claimed in claim 11, wherein the foreground extracting step determines which 8 x 8 DCT blocks contain at least a predetermined amount of foreground pixel information; and wherein the encoding step encodes the entire 8 x 8 block of DCT coefficients at the first higher quantization level if the 8 x 8 block of DCT coefficients contains the predetermined amount of foreground pixel information.

13. The computer-executable process steps as claimed in claim 11 and 12, wherein the step of foreground extracting computes the difference in location of like pixels in each image and selects

the foreground pixels as those pixels whose difference in location falls above a threshold distance.

14. An apparatus for processing a stereo pair of images, the apparatus comprising:

a memory which stores process steps; and

a processor which executes the process steps stored in the memory so as (I) to extract foreground information from the stereo pair of images and (ii) to encode the foreground information at a first high level of quantization and to encode background information at a second low level of quantization.

15. An apparatus for processing a stereo pair of images, the apparatus comprising:

a memory which stores process steps; and

a processor which executes the process steps stored in the memory so as (I) to extract foreground information form the stereo pair of images in the form of foreground 8 x 8 DCT blocks of coefficients, and (ii) to encode the foreground 8 x 8 DCT blocks of coefficients at a first high level of quantization and to encode background 8 x 8 DCT blocks of coefficients at a second lower level of quantization.

16. An apparatus for processing a stereo pair of images, the apparatus comprising:

a memory which stores process steps; and

a processor which executes the process steps stored in memory so as (I) to calculate the difference in location of like pixels in each image, (ii) if the difference in location is above a set threshold the pixel information is identified as foreground pixel information, if below the set threshold the pixel information is determined to be background pixel information, (ii) to determine whether each 8 x 8 DCT block contains a particular amount of foreground pixel information and (iv) to encode those 8 x 8 DCT blocks having at least the particular amount of foreground information at a first higher level of quantization and those 8 x 8 DCT blocks having less than the particular amount of foreground information at a second lower level of quantization.